CLAIMS

We claim:

1. An intervertebral spacer device, comprising:

a spacer body dimensioned to fit between two vertebrae,

the spacer body having a plurality of outer surfaces, the plurality of outer surfaces including a first outer surface and a second outer surface, the first and second outer surfaces facing away from one another,

the spacer body having a plurality of linear grooves engagable by an intervertebral spacer device insertion tool having a plurality of linearly extending groove engagement members, the plurality of linear grooves including a first linear groove formed in the first outer surface and a second linear groove formed in the second outer surface, the first and second linear grooves being parallel to one another.

2. The intervertebral spacer device of claim 1, wherein each of the first and second outer surfaces is convex.

3. The intervertebral spacer device of claim 1, wherein the first outer surface is an upper surface of the spacer body and the second outer surface is a lower surface of the spacer body.

4. The intervertebral spacer device of claim 1, wherein the spacer body has a rectangular pillow shape characterized by convex upper and lower surfaces and rounded corners and rounded edges.

5. The intervertebral spacer device of claim 1, wherein the plurality of linear grooves comprises a first set of linear grooves formed in the first outer surface and a second set of linear grooves formed in the second outer surface, the first set of linear grooves being parallel to the second set of linear grooves.

6. The intervertebral spacer device of claim 5, wherein each linear groove in the first set of linear grooves is directly opposite a respective one of the linear grooves in the second set of linear grooves.

7. The intervertebral spacer device of claim 1, wherein the spacer body comprises a porous material.

8. The intervertebral spacer device of claim 6, wherein the porous material of the spacer body is selected from the group consisting of porous metals, compacted wire meshes, bone morphogenic protein, and polylactic lactic acid.

9. The intervertebral spacer device of claim 1, wherein each of the first and second linear grooves has a smooth surface.

10. The intervertebral spacer device of claim 8, wherein at least one of the first and second outer surfaces is rough.

11. An intervertebral spacer device insertion tool, comprising:

a tool body having a proximal end and a distal end, the distal end of the tool body having at least two heads that are movable inwardly toward one another to hold an intervertebral spacer device to be inserted into an intervertebral space using the intervertebral spacer device insertion tool;

each head of the distal end of the tool body having an inwardly facing surface that has at least one linear protrusion spaced and dimensioned to fit within a corresponding at least one linear groove of the intervertebral spacer device when the heads of the distal end of the tool body are holding the intervertebral spacer device, the at least one linear protrusion of the inwardly facing surface of the head being spaced and dimensioned so that the inwardly facing surface otherwise avoids the intervertebral spacer device when the heads of the distal end of the tool body are holding the intervertebral spacer device.

12. The intervertebral spacer insertion tool of claim 11, wherein the proximal end of the tool body is operable to close the heads.

13. The intervertebral spacer insertion tool of claim 12, wherein the tool body comprises first and second arms, each having a proximal end and a distal end, and a central hinge about which the arms pivot such that the bringing together of the proximal ends of the arms brings together the distal ends of the arms, and separation of the proximal ends of the arms separates the distal ends of the arms, and wherein the at least two heads comprises a first head a second head, the first head being disposed at the distal end of the first arm, the second head being disposed at the distal end of the second arm.

14. The intervertebral spacer insertion tool of claim 11, wherein each head of the distal end of the tool body has an outwardly facing surface that is continuous and convex.

15. The intervertebral spacer insertion tool of claim 11, wherein each head of the distal end of the tool body includes a plate having an outwardly facing continuous convex surface and the inwardly facing surface, and the at least one linear protrusion on the inwardly facing surface protrudes to a distance greater than a depth of the corresponding at least one linear groove of the intervertebral spacer device.

16. The intervertebral spacer insertion tool of claim 15, wherein the inwardly facing surface has a contour that approximately follows an outer contour of the intervertebral spacer device.

17. The intervertebral spacer insertion tool of claim 11, further comprising a bracing member relative to which the heads of the distal end of the tool body are longitudinally movable, the bracing member having a distal end positionable against the intervertebral spacer device when the heads are holding the intervertebral spacer device.

18. The intervertebral spacer insertion tool of claim 17, wherein the tool body includes a bore through which the bracing member passes.

19. The intervertebral spacer insertion tool of claim 18, wherein the tool body comprises first and second arms, each having a proximal end and a distal end, and a central hinge about which the arms pivot such that the bringing together of the proximal ends of the arms brings together the distal ends of the arms, and separation of the proximal ends of the arms separates the distal ends of the arms, wherein the at least two heads comprises a first head a second head, the first head being disposed at the distal end of the first arm, the second head being disposed at the distal end of the second arm, and wherein the central hinge includes the bore.